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Our American Art Schools.

INTRODUCTORY.

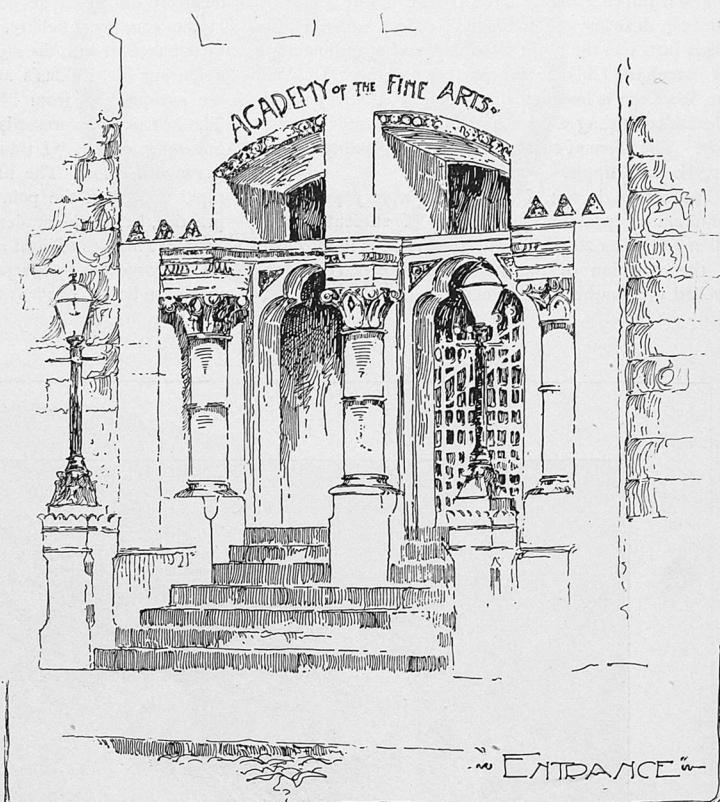
IN THE THIRD ANTIQUE ROOM. SKETCH BY
M. H. BANCROFT.

URING the course of these articles the aim of the writers will be to report impartially the facts concerning Art Education throughout the United States and Canada. This will be done, we hope, without bias toward any particular method or style. The old and new schools of painting each have their partisans who are apt to proclaim their own truths in disproportionate value. One party believes in minute, stippled finish and tediously accurate outline; another in sketchy, vigorous impressions and bold, forcible masses. One group holds detail and texture to be the most important qualities of a painting; another believes in color and brushwork as the only saving virtues. Among all these we hope to keep clear of prejudice for or against, and at the same time to recognize that there is not one art for Tompkinsville and one for Paris, but that in each place the artist's work must be judged by the same laws. Careful drawing, despised by some extremely mod-

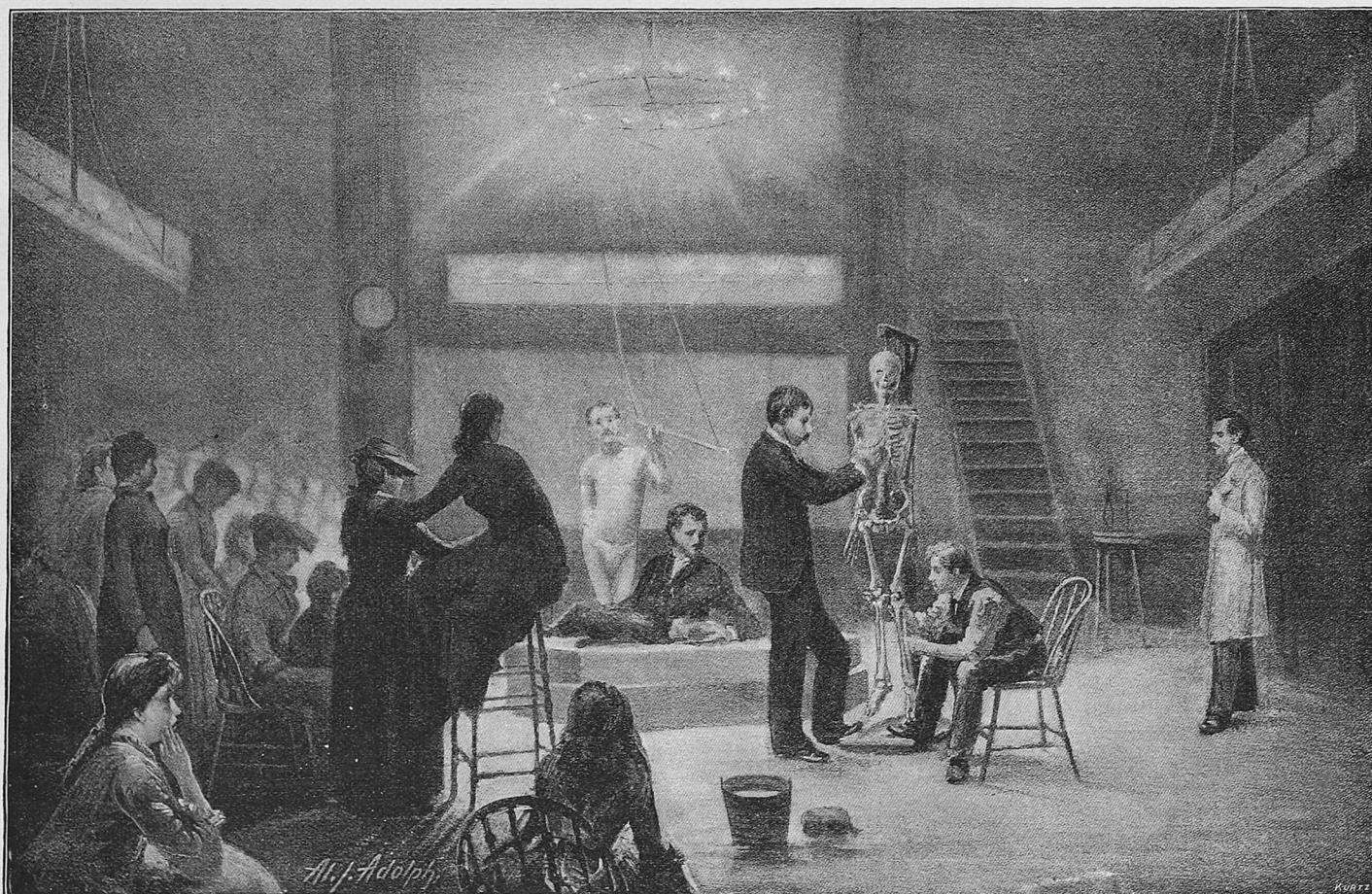
ern theorists, must make itself felt in even the most hasty impressions. Form, color and the less easily defined quality called sentiment, are all necessary, and no one of these can be given undue prominence without detriment to the others. It will be our endeavor also to give the opinions of many specialists both on the art they teach and the best method of imparting it. Their advice, we hope, may assist masters to bring out the hidden talent of their pupils, while it will be helpful to students throughout the country in imparting to them the views of many professors holding varied opinions. By reports on these lines it is hoped that a true record of the progress of art teaching to-day may be reached, and that it may help in no small measure to advance the cause of art wherever we may find readers.—EDITOR OF THE ART AMATEUR.]

PHILADELPHIA.—I. THE ACADEMY OF FINE ARTS.

THE Pennsylvania Academy of Fine Arts is an imposing building in modern Gothic style, standing at the corners of Broad and Cherry streets, not far from the City Hall. The exhibition rooms, of which there are nine, contain a fine permanent collection of works of art. They are on the second story, where also a special exhibition is occa-



sionally given. On the ground floor are class-rooms spacious enough, but poorly lighted by side windows. Here is a fine collection of casts from the antique, but as this is free also to the public, strangers are present while the students are at work, an arrangement which can hardly be regarded as helpful to the latter. In no



DEMONSTRATION OF ANATOMY AT THE PENNSYLVANIA ACADEMY OF FINE ARTS. SKETCH IN OILS BY A. J. ADOLPH.

THE ART AMATEUR.

other of the schools I have visited does this condition prevail, although in Chicago advanced pupils work on some of the larger casts in the rooms where they are on public exhibition.

The curriculum at the Academy includes drawing from the antique and from life (the nude), together with modelling and anatomy. Mr. Thomas P. Anschutz and Mr. James P. Kelly have charge of the classes in painting, drawing and modelling. Mr. Charles H. Stephens instructs the night class in drawing and painting. Mr. Bernhard Uhl's teaches portrait painting. Dr. William W. Keen is instructor in artistic anatomy, and Mr. Alexander Stirling Calder is the demonstrator of anatomy. The office of curator and librarian is ably filled by Mr. H. C. Whipple.

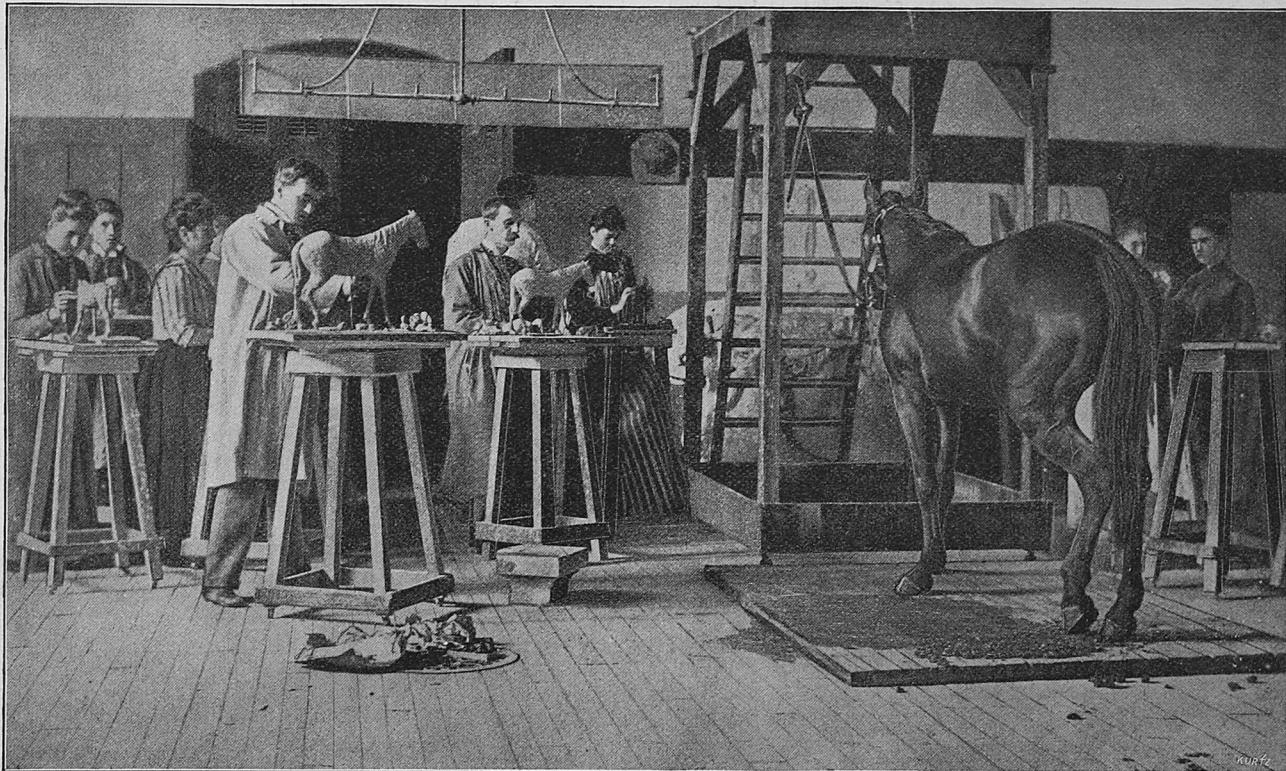
The school is not, I believe, in a very prosperous condition at present, the number of students having fallen so low as 280. This decline is attributed chiefly to the cessation of the free classes, which not only swelled the numbers but brought in many real workers,

supervision of that excellent painter, Mr. Thomas Eakins. During his regime the plan of study was systematized. Much attention was given to anatomy, and the dissection of animals and of the human figure formed an important feature of the course. This is not given so much prominence now, although it is still an obligatory part of the work done. Thirty-five lectures on anatomy are delivered during the session. This is the only art school in the country, I believe, where dissecting is taken up in connection with the study of anatomy.

During Mr. Eakins's superintendence, painting from the antique and from life took the place of drawing. The instructor expressed himself on this point to the following effect: "I think a student should learn to draw with color. The brush is a more powerful and rapid tool than the point or stump. Very often, in practice, before the student has had time to get in his broadest masses of light and shade with either of these, he has forgotten the purpose he had in view. Charcoal would be better, but it is clumsy and rubs off too easily

unless the student fancied he had mastered drawing before he began to paint. Certainly it is not likely to happen here. The first things to attend to in painting the model are the movement and the general color. The figure must balance and appear solid and of the right weight. The movement once thoroughly understood, every detail of the action will be an integral part of the main continuous action, and every detail of color auxiliary to the main system of light and shade. The student should learn to block up his figure rapidly, and then give to any part of it the highest finish without injuring its unity. To attain these ends I have not the slightest hesitation in calling the brush, and an immediate use of it, the best possible means."

Now, however, the pupils use charcoal and crayon, as in most schools, until they become "strong" draughtsmen, when color is taken up. The school is conducted upon a conservative plan—conservative, that is to say, as contra-distinguished, not from progressive, but from radical or revolutionary methods.



THE MODELLING CLASS AT WORK AT THE PENNSYLVANIA ACADEMY OF FINE ARTS. FROM A PHOTOGRAPH.

who helped indirectly by imparting energy to the school. It often happens that those who can afford to pay for tuition take it in a half-hearted fashion; while others whose means will not permit them to do this prove, by close application, how they value their opportunities, and thus set a good example. Could these free classes be resumed, the masters believe the old prosperity of the Academy would be easily regained. The school is open to both sexes. Its object is to afford instruction, of the highest order, to those who intend making painting or sculpture their profession; but it also proposes to extend, as far as possible, the same benefits, as a foundation for their art, to engravers, die-sinkers, illustrators, decorators, wood-carvers, stone-cutters, lithographers, photographers, and the like, this class of students being always largely represented at the school. While in the Academy classes the only instruction is in the fine arts, the mechanical part of their crafts those who do not intend to follow these are expected to learn outside, in the work-shops, or in technical schools.

Prior to February, 1886, the school was under the

for students' work. The main advantage of the brush, however, is the instant grasp it secures on the construction of the figure. It was found out long before Fortuny put on record his detestation of them, that there are no lines in Nature, but only form and color. In drawing the figure, the least important, yet the most difficult thing to catch, as it is the most liable to change, is the outline. The student drawing with a point, the outline of the model is soon confused and lost; for if the model moves a hair's breadth, already the whole outline has been changed, so that he has perpetually to rub out and make corrections in his work. Meantime he gets discouraged and disgusted, long before he has succeeded in making any sort of portrait of his subject. Moreover, the outline is not the man; the construction is. Once that is obtained; the details follow naturally. As the tendency of the point or stump is, I think, to reverse this order, I prefer the brush and do not at all share the fear entertained by some that the charms of color will intoxicate the pupil and cause him to neglect form. I have never known anything of this kind to happen,

"No distinctively original, or 'new' methods are employed," said one of the professors. "No rigid order of study is enforced. Our students stay with us for so short a time—a year or eighteen months, generally going to New York or Paris—that it is not practicable for us to demand that any certain amount of time should be spent upon any one branch of study. If a student, after a short stay in the antique class, desires to enter the life class he may do so. Perhaps he may return to the antique later on. If in a few months he wishes to work his studies in color instead of monochrome he is allowed to use the brush."

"In teaching, we do not lay emphasis on any one quality as desirable to be acquired, rather than another. We do not say, 'spend all your effort upon a correct, careful outline,' or 'look for the values; unless your values are correct you have nothing,' or 'you must paint, and not draw.' If there is any one thing upon which we do put particular stress it is the desirability of feeling from the very outset for the *character* of the model, and trying to express that instead of being satisfied with



ROYAL WORCESTER DESIGN.

BY H. A. CROSBY.



COMPOSITION CLASS SKETCH. SUBJECT FROM "SHE STOOPS TO CONQUER."

WASH DRAWING. BY LOUIS M. GLACKENS, STUDENT OF THE PENNSYLVANIA ACADEMY OF FINE ARTS, PHILADELPHIA.

making a map of the mere outlines of the figure, as seen at any given moment against the background. We endeavor to teach our students to see as well as to draw; to learn to look at Nature properly, and to regard it in its fullest, broadest meaning."

All the present professors were formerly students at the Academy, which they attended while it was under Mr. Eakins's direction. They may be said to carry out with some few modifications the method formulated by him. They are all young men, and appear to work together in perfect harmony. In many cases there are paintings of former pupils at the important annual exhibitions held in the same building, which speak well for the general soundness of the Academy's methods of instruction.

The annual Tappan prizes (founded in 1882), by Mrs. Charles Tappan, Miss Harriet R. Tappan and Mr. Robert N. Tappan, are the only ones awarded at this school. They are \$200 and \$100 respectively, and are given for the best and second best pictures by students of the Academy who have worked regularly in its school for at least two years; one of the years must be the school year preceding the exhibition at which the prize is awarded, with the provision, however, that there shall be no obligation to award a prize to any work which is not, in the opinion of the committee, of sufficient merit to deserve it. The pictures submitted may be either in oil or water color. They may be either figure or cattle pieces, landscapes or marines. The prize winners up to the present year have been: 1882—first prize, William T. Trego; second prize, Susan H. Macdowell. 1883—no first prize; second prize, Gabrielle D. Clements. 1884—first prize, Charles H. Fromuth; second prize, Ellen W. Ahrens. 1885—first prize, Elizabeth F. Bonsall; second prize, William B. Bridge. 1886—first prize, Annie Dodge; second prize, Charles F. Browne. 1888—first prize, Benjamin Fox; second prize, Milton H. Bancroft. 1889—first prize, Jennie D. Wheeler; second prize, Louise Wood. 1890—first prize, Hugh H. Brickinridge; second prize, William J. Edmundson.

The following artists of more than local reputation are among those who have received, in part, their education at the Academy: Paul Weber, Robert Wylie, George C. Lambdin, P. F. Rothermel, Samuel B. Waugh, John Sartain, Daniel R. Knight, Walter Shirlaw, Edward M'Ilhenny, Arthur Parton, Thomas Eakins, William Sartain, F. B. Schnell, Anna Lea, Mary Cassatt, Howard Helmick, Peter Moran, Milne Ramsey, William H. Lippincott, A. B. Frost, Henry Bisbing, E. A. Abbey, Kenyon Cox, Leon Delachaux, C. P. Grayson, Cecilia Beaux, William T. Smedley, James Pennell, Frederick J. Waugh, Robert Blum, John J. Boyle, Harry R. Poore, Harry C. Bispham, Fidelia Bridges, William M. Harnett and Emily Sartain.

The illustrations of the present article, with the exception of "The Modelling Class at Work"—which is taken from a photograph—are by pupils in the school. The initial letter, showing a student at work in "the third Antique Room," is by M. H. Bancroft, the same clever young artist who did the graceful thirty-five minutes' sketch illustrated here-with in miniature. The original was done in the composition class in pencil, on a sheet of gray drawing paper about double the size of this page; the sky at the back was put in with Chinese white. The subject given out to the class was "Four Figures and a Landscape." This graceful and spirited sketch suggests somewhat close familiarity with the work of Winslow Homer; but it must be admitted that the student could hardly follow a better master. The full-page illustration shows another subject given out in the composition class, a scene from "She Stoops to Conquer." Mr. Glackens has certainly done wonderfully well with his theme. The composition is so spirited, the drawing is so good and the color is so effective that he need never despair of paying commissions as an illustrator so long as he keeps up to the standard of excellence he has set himself here. It is hardly necessary to say that this is no hasty sketch like the other. The design was done in washes of India ink on white paper. The reproduction is only a little smaller than the original. It will be interesting to many readers to learn that all the illustrations of the present article are reproduced directly without the interposition of the engraver. With the exception of the pen drawing of the Academy building, which is reproduced by the ordinary line photo-engraving proc-

ess, they are all made by the Kurtz or "half-tone" method, which is similar to that invented by the German, Meisenbach, who discovered the way to make plates for relief printing from pictures without defined lines, by interposing between the image of the original and the plate a wire screen which in its greatly reduced aspect furnishes the tint which is characteristic of all reproduction photo-illustrations of this kind.

The admirable illustration of the "Lecture on Anatomy" was painted in monochrome in oils by Mr. A. J. Adolph, which method is largely employed by artists engaged on the more important of the illustrated publications. The original was many times larger than the reproduction given herewith. It is but fair to say here that Mr. Adolph's proficiency is not entirely due to his training in the Academy of Fine Arts. For several years he was at the Pennsylvania Museum and School of Industrial Art presided over by Professor L. W. Miller.

This illustration gives a better idea of the general char-

MR. BECKWITH ON PORTRAIT PAINTING.

"IN copying my seated figure," said Mr. Beckwith, holding the original of our color plate before him, "the student should choose a mounted and prepared canvas of medium texture and of the same size as the plate. He will need besides charcoal, brushes, pigments and so forth, which I will refer to more particularly in their proper place. The first step is to make a good outline drawing in charcoal. For this the charcoal, which should be of the best quality, must be well sharpened. Let him with a light horizontal stroke indicate the place of the top of the head at the proper distance from the upper edge of the canvas. He should next place a touch to locate the chin and determine the length of the head. With the charcoal lie will measure the number of heads in the length of the figure and in the same manner fix with a touch the place for the sole of the foot. Next, he should define the distance from the edge of the canvas to the outer line of the left arm, and do the same for the right arm, so establishing the width and length of the figure and its place in the picture.

"The larger contours are next to be drawn; and first the line around the head. Great precision or accuracy of outline is not to be aimed at this stage of the work; but the general form should be observed, and the line should be light though firm. The lines of the shoulders, on both sides, will be rapidly drawn in, and a touch will be given to indicate the edge of the book, a little less than the length of the head below the chin. The point of the toe raised in the air will also be located and a few strokes will give the movement of the leg. The line from left knee to the base of the foot and that of the left leg being added, the principal lines of the figure will have been given.

"In the same manner the student should draw in the chair. The shadows in the coat and trousers should be indicated with the broad side of the charcoal. The hands should be blocked out, and then the student should return to the head, and with finely pointed charcoal draw in the masses of the eyes, nose, mouth, chin and hair.

"The shadows lightly indicated throughout the figure, he must go on to locate the objects in the background, shading gently with the flat side of the charcoal. All the lines of this charcoal sketch should be firm and clean; all the shadows flat, even tints. When it is finished it is to be fixed with the atomizer, and while it is drying the student may set his palette.

"The following are the colors that I use and recommend: White, yellow ochre, light cadmium, vermilion, brun rouge [no other pigment that I know of will take the place of this last], light and deep rose madder, cobalt, Prussian blue, Emerald green (not the same color as emerald green), raw Sienna, burnt Sienna, raw umber, Brussels brown, ivory black. Prussian blue has been given a bad name as a fugitive color. I have not found it so; but it requires to be used with care, because it is a very powerful pigment, and a little of it will serve to modify other colors.

"The pupil will require half a dozen of bristle brushes from one eighth of an inch to half an inch in width, and also two pointed sables. Thinning his colors with turpentine, he should now proceed to lay on general large tints (as if he were painting in water-colors), to give the tones of the clothes, the leather of the chair, the background, the hair and a gentle tone of flesh over the face and hands. This coloring dries quickly. Throughout the rest of the painting a mixture of oil with one fifth 'Siccatis Courtray' should be used. With a slight touch of this the tint for the dark part of the fireplace and the other strong darks should be mixed and applied, such as the shadow near the head under the mantel, the back of the book, the dark mirror, the shadows under and back of the chair. The next step is to take a clean brush with which to lay on the strong lights of the cast, the white of the photograph back of the head and the other principal lights.

"He will now have the two extremes of light and dark established, and the other tones given in a general way by the turpentine washes. His work henceforth is to discriminate and correct, mixing his colors of the required tint and putting them on directly and solidly. He should use his brush in the sense of the forms, as the French say—that is, following their main direction, as is shown by the brush marks on the brow, under the eye,



COMPOSITION CLASS TIME SKETCH (35 MINUTES).
BY M. H. BANCROFT, STUDENT.

acter of such a class room as it represents, and its equipments, than any more description could do. It will be seen that the students are not compelled to sit at desks arranged in rows as in a primary school, but are allowed to accommodate themselves about the room much as they please. Plenty of clear space for the Demonstrator and his subject is, of course, essential, and there must be plenty of light for the students to draw by. Rules and theories are not read out from books, but in grim silence hangs the frame upon which the human form is constructed, and the instructor refers from time to time to any points upon which he may wish to enlighten students in connection with the anatomy of the model. The sponge and pail of water are seen with which the clay is moistened; for modelling as well as drawing is done. In the background we see a "modelling stool" or "stand" with a wire "frame-work," upon which a small figure is modelled, the wire preventing the clay from sinking.

ERNEST KNAUFFT.

on the cheek, down the nose, in the folds of the coat and elsewhere. If a touch is wrong and will not keep its place, it should be scraped clean off with the palette-knife, and another tone be freshly prepared to take its place. Correctness and directness of drawing and freshness and purity of tones are what the pupil should principally aim at. I might go on to tell him with what colors he may mix this or that tint—rose madder and black for the chair, and so on—but I fear it would only prevent him using his own eyes. With the colored plate before him, and given the palette with which its tints were produced, he should learn by himself to reproduce these latter. If a work of art of any sort, even a copy, is to have any value, it must be due to the individual judgment of its maker. Hence, I do not believe in telling students too much. Having set them on the right way, I expect them to use their eyes and their reason. To furnish them with recipes in detail would tend to make of them mechanics, not artists."

STILL-LIFE PAINTING IN OILS.*

VI.—FISH.

REPRESENTATIONS of fish are never so pleasing to the artistic sense as when associated with water or actually *in* their native element. Painting the denizens of aquaria is a departure from still-life, as any one who tries it will soon discover; but it is interesting, and sometimes very successful. Bait may be placed where it is likely to be sought from one particular side; and a fish thus tempted will assume about the same position over and over again. Some imagination must be brought to bear in order to make a glass wall of an aquarium appear like a section of flowing water; in fact, the glass must be ignored, and the water within painted as if apart from all artificial conditions. The shadows, the penetrating lights, may be rendered without much difficulty; it is the capricious subject itself that will tax the skill. If momentary glimpses give a perfect conception of form, all will go well, but if not, it is best to let the murderous hook do its work. Then we can proceed to immortalize its victims at leisure. In either case, what we have to say of color and texture is equally applicable.

The scales of some fish are thick and thoroughly overlapped like a coat-of-mail; others are thin and not so closely or so firmly set. They owe their lustre to superficial crystals. Upon the ablette, a species of carp, these are so brilliant that they are used in preparing the gewgaws known as Roman pearls. Fish living in clear waters that receive plenty of sunlight not only appear more brilliant, but are more brilliant than others, their coats being better supplied with color-cells; and if from any cause these waters become turbid, the fish will likewise change. Trout are particularly susceptible in this way, and they also lose their beauty very quickly after being caught. They should not be chosen as models for early practice in painting fish, little favorites as they are; for under faltering hands their bright jewels will vanish as if by magic.

Our common fresh-water perch are desirable; they are symmetrical in form, and their rich, varied color may be depended upon for some hours. Pickerel have ugly heads, but are otherwise handsome, and, like most of the pike family, keep their fresh appearance long after coming out of the water. There are several other fresh-water fish that look well on canvas if happily treated. Those that are broad or

thick for their length are sure to appear stiff; as a rule, it is best to choose the slender and pliant.

It is a physical requirement that the fish should have come right out of the water, and is it not an artistic requirement that some accessory should bear testimony of the fact? A forked branch stripped of the green leaves that have helped to shade the path

and go on with such varying shades as can be got at, apart from lustre or iridescence; shadows, too, may be smoothly laid on. With all this first painting, "siccifat de courtray" should be used, that the surface may be dry in good time to receive the finishing tints. Thus far the colors shall have been kept a little warmer than they seem, to allow for the neutralizing effects of silvery

and gray tints; in the prevailing olives, for instance, less blue and black and more raw umber and yellow. The cruder yellows should not be used except in a dainty way in finishing. Indian yellow and yellow ochre are the best for the first painting. While waiting for the drying, outlines may be perfected, fins and tails carefully carried out, and all the nice work about the heads may be looked after. When there is not much tack left, characteristic markings, like the broad, soft bands on perch and the dark network on pickerel, may be laid in with very thin color. In the final painting, any or all the colors of the rainbow may be used, if only they are daintily used and not over-manipulated; neither must they be carried the least beyond where they are wanted. They are to add to the effect of the first painting, not to supplant it. High lights and grey tones come last, and nice discrimination is needed to bring all in harmony.

Although copper kettles and vari-

ous things pertaining to the kitchen are painted in studies of fish, especially salt-water fish, it is not difficult to find out-door objects that are associated with them. When I have been in some of our New England fishing towns, I have thought it difficult to find anything not associated with them. We do not usually string and suspend salt-water fish for painting; the most pleasing specimens are too large. A single one may lie out against a well-chosen background, with suitable accessories. I have used a bit of rock, having sand, drift and swaying grass around; and brought in the distance a tilted fish-car, a fluke of an anchor and a stray coil of rope.

It is usually supposed that salt-water fish keep longer than fresh, but the same precautions must be taken, except that salt water instead of fresh should be used for wetting them. Large and conspicuous scales make the question of texture somewhat harder. They must not be treated too mathematically; it is only here and there that the light will strike them so as to show their divisions distinctly. As to the treatment of color, the general directions given above are applicable to all the finny tribe.

Shell-fish painted in oils always appear as if destined for the walls of a restaurant. There is no such objection to painting them in mineral colors, for then their purpose is to decorate. Any who may care to try them in oils will find instructions that they can adapt to the work published in *The Art Amateur* of June, 1887—one of the "Practical Lessons in China Painting".

(To be concluded.)

AFTER A WATER-COLOR STUDY BY MOREAU LE JEUNE.



AFTER A WATER-COLOR STUDY BY MOREAU LE JEUNE.

anything that will hold water, here, too, is a chance for some good realistic work. In a group only two or three of the outer fish will show entire, perhaps only one will be strongly lighted. They must be well drawn—every beautiful curve must be faithfully produced and the proportions nicely observed. When drawing them with charcoal and pencil, begin with the darkest local color

landscape that when it is offered to them they do not perceive or value it. The popular qualities in landscape, he remarks, are color first, then texture, composition and chiaroscuro. The naked figure, or the figure simply draped, is the only subject in which classic line-drawing fully repays the student. Here the talent of a refined draughtsman is felt and acknowledged.

* Continued from the September number of *The Art Amateur*.

PEN DRAWING FOR PHOTO-ENGRAVING.

XIX.—BOOK ILLUSTRATION; FURTHER ADVICE.



LAST month was considered the use of motives for designs drawn from every-day objects. Let us resume this topic. To make my meaning more plain, we will suppose a publisher sends you the manuscript of some humorous verses, or a modern fairy tale, or something of that kind, and suggests the following subjects for some simple designs for it:

A head-piece to a poem, consisting of a pair of open shears stretching along the top of the page and cutting off a pumpkin from a large vine, the leaves of which vignette along the side of the page about half way down, at which point there is to be a picture of a corn-field, with a scarecrow formed of a stake, to which is fastened a pair of trousers flying in the air. This design, moreover, is to be arranged to form the letter F or T. At the right-hand lower corner of the same page, to balance the above design, there is to be a basket upset, with a pumpkin or two rolling out, and, by way of foreground, a little corn stubble growing, whereon they have fallen or are about to fall.

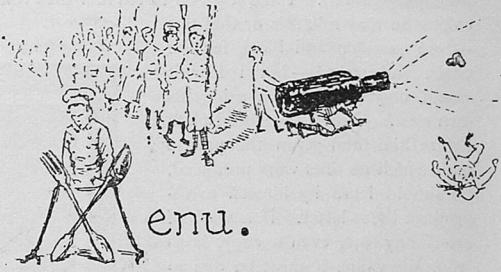
Let any reader attempt to make this, and afterward to form the initial I out of a very clumsy, worn-out cotton umbrella; then to make a head-piece consisting of a harp, or some other musical instrument in one corner, with a candle illuminating a sheet of music, for the device on the top of the same page, above which is a bar of music bearing the words "Part 2" in letters resembling musical notation. Then let him try a tail-piece consisting of a small restaurant table, on which, under a microscope, is placed a very small pumpkin pie, while near by stands a hand-bag and coffee-pot; and for a design to go in the text, let him show a hatbox on its side, the cover lying by it, with an ace of hearts visible in the box itself. To carry out these ideas in practical decoration, the student will find he has his hands full. But having made such and similar ones, for which he has studied each object introduced from the thing itself, and learned its character, its construction and its salient forms, he will find it an easy task in future to introduce the objects he has grasped so thoroughly into other compositions. This is what I mean when I speak of studying the character of things.

Possibly some of my readers may fancy that the French Comic Opera which I have cited is an exceptionable case, and that common-place objects rarely play so important a place in the illustrations of books. If so I would refer them to such a book as Hans Christian Andersen's "Stories and Tales." How suggestive its contents are, "The Teapot," "The Rags," "The Candles," "The Princess and the Pea," "The Neck of a Bottle," "The Butterfly," "The Old Street Lamp." In an edition published by Hurd and Houghton in 1876, we find one of the illustrations to the last-mentioned story consists of a street lamp upon the seat of an arm-chair in the foreground, with an aged couple just faintly sketched in the background. "The Candles"

begin in this way: "There was a great wax-light that knew well enough what it was. 'I am born in wax and moulded in a form,' it said. 'I give more light, and burn a longer time than any other light. My place is in the chandelier or a silver candlestick.' 'That must be a charming life!' said the tallow candle." These few lines show what a fine opportunity there is here for contrast; the erect, "smart" aristocratic wax-light in an artistic silver candlestick on one hand, the slightly oblique tallow dip, with the grease all congealed on its sides, on the other.

"Learning to draw is learning to see." That is an old truism which nobody denies. Did you ever think how true also is its antithesis—learning to see is learning to draw? and it was upon that principle that the suggestion in the last paper was given. It is not merely that I advise your drawing the commonplace objects around you; but observing them when you are not drawing, or making mental notes and studies of their picturesque elements. Let me refer to Hans Christian Andersen again; his writings are full of examples of that quality of true vision, for he discovered a picturesque element in everything. Let us take the introductory lines to "The Teapot." "There was a proud teapot; proud of being porcelain, proud of its long spout, proud of its broad handle; it had something before and behind—the spout before, the handle behind—and that was what it talked about; but it did not talk of its lid, that was cracked, it was riveted, it had defects, and one does not talk about one's defects—there are plenty of others to do that." The draughtsman must be self-satisfied indeed who would feel that he was capable of

deep, fundamental knowledge of things. Mr. J. Ward Stimson, superintendent of the "Institute for Artist Artisans," expresses the idea very well in a term he is fond of using—"organic principles." It is difficult to show a person the dividing line between the artistic and the



inartistic; it is difficult to explain why Elihu Vedder's or William Blake's designs for head-pieces or tail-pieces are better than the ordinary run of the designs appearing in the thousand and one periodicals throughout the world. "There is too loud a distinction," says Miss Emily Sartain, in a recent pamphlet, "made between fine art and industrial art. Barye's bronzes, unless well done, would be mere mantel ornaments. French applied art is pre-eminently fine because so many skilled artists turn their knowledge to the service of some branch of manufacture. Here is the main reason that we send so much money to Europe for bronzes. It is not that the metal is finer, but that the mould which gives

it form comes from the hand of a skilled artist. An eye trained to accuracy and to the delicate discernment of subtleties of line, and form, and color, trained by study of the swaying, melting, yet strong and meaningful curves of the human body, can quickly seize and express the characteristics of simpler forms."

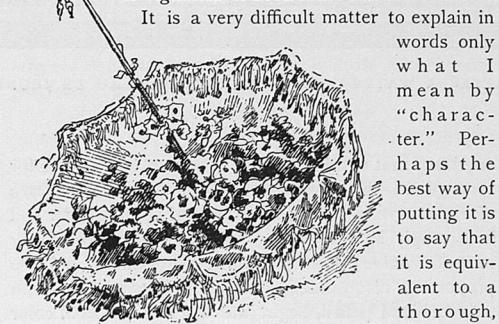
Now there are designers and draughtsmen for the daily press, trade publications, and the like, who, on account of lack of artistic training, inadequate pay, and the necessity for rapid production, are unable to express with any degree of accuracy the forms they are required to draw. I have before me as I write a scrap-book of such designs, and you will readily recognize the following conventional forms which are introduced for symbols: From an Art trade paper several headings have been clipped, wherein have been thrown together—"arranged" the artist would have said—such forms as he considered appropriate for headings to the departments, "Art Publications," "Bric-a-brac," "Art Novelties," etc. In these we have Japanese umbrel-

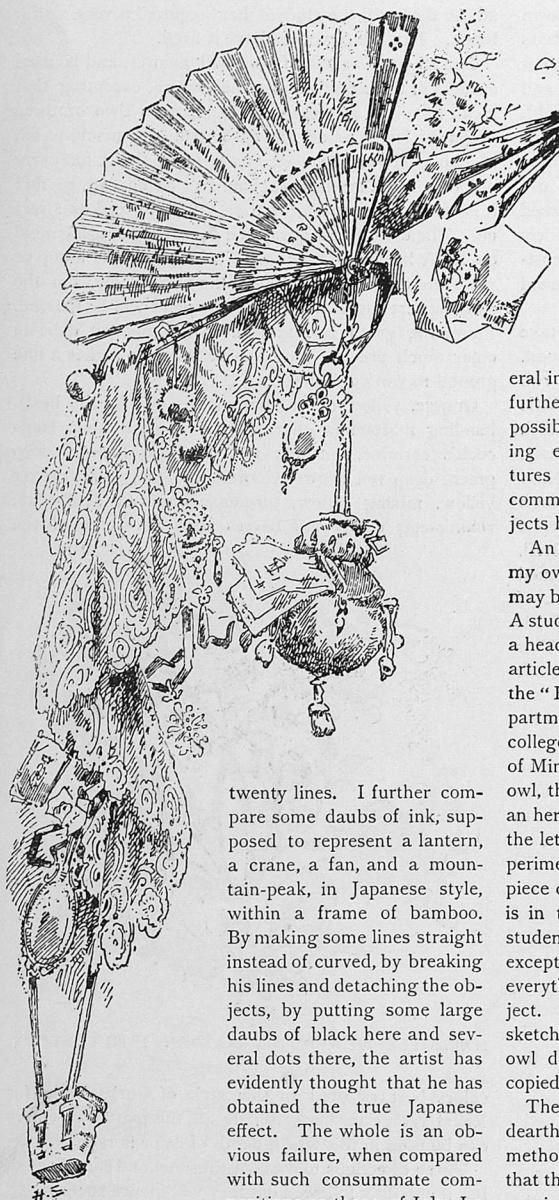


las, dolls, fans, screens, porcelain and pottery; there are palm leaves, apple blossoms, water lilies, olive branches, laurel leaves, peacock feathers, bows and streamers, books, lamps of knowledge, birds of wisdom—the owl; palettes and brushes, port-crayons, dividers, engravers' tools, bottles of ink, quill pens, printing presses, portfolios, anvils, mandolins, innumerable scrolls, figures arranged in medallions, plaques, "Truth," with her mirror, Cupids and Minervas. For other uses, in the same book of designs, I find roaring lions, cooing doves, prattling parrots, strutting peacocks, soaring eagles and crowing cocks. At first sight any of these designs seems to tell its tale fairly well, but pick out either of the objects portrayed and compare it with its treatment in a work of real art, representing the same thing, and see how inadequately the lines express its natural character in these inferior examples.

Here, for instance, I find in the corner of one device, the outline of an oval wherein two black dots half way down, a triangle somewhat lower, and a few teeth, are supposed to sufficiently portray a human skull, which is introduced in the design as an emblem of the frailty of human life. The zygomatic arch is ignored, the jaw-bone unmarked, the sutures in the skull are absent. How grand, how forcible a simple design, by Elihu Vedder, wherein the skull is anatomically correct, appears in comparison to it! A hundred lines are used in another cut to draw a quill pen, a brush and a palette; while the same objects, by Francis Lathrop, in a design for a book-cover, are superbly suggested with less than

designs of some things from the list given last month, arranged so that they might be used for head or tail-pieces, initial letters or vignettes in book illustration.





twenty lines. I further compare some daubs of ink, supposed to represent a lantern, a crane, a fan, and a mountain-peak, in Japanese style, within a frame of bamboo. By making some lines straight instead of curved, by breaking his lines and detaching the objects, by putting some large daubs of black here and several dots there, the artist has evidently thought that he has obtained the true Japanese effect. The whole is an obvious failure, when compared with such consummate compositions as those of John La Farge. In another the designer has introduced Corinthian columns, Gothic terminals, Venetian glass and German wrought iron. How poorly the lines stand for what they aim to express when compared with the design by a well-trained, conscientious German lithographic draughtsman for a cover to a serial, "Art Work of the Renaissance." The reason for this is very clear; our newspaper draughtsman and our trade journal designer, and the rest of them, have never drawn the human skull carefully, nor possessed any knowledge of anatomy. A palette, a quill pen and a brush have seemed such simple affairs to them, that they have drawn them without forethought; never imagining that the curve of beauty could be introduced in the outlines to the palette, or indications of the harmony of parallelism in the feathers of the quill pen. These objects and the Japanese, Grecian, Venetian and German art forms are all drawn from the general impressions their memories have received from illustrations of the objects. Neither one, probably, has ever gone to the Metropolitan Museum of Art, or any similar collection, to study the original objects for themselves, while, on the other hand, John La Farge and our German lithograph designer have steeped themselves in the study of the actual things they depict.

I want to make as strong a plea as possible in this paper for that kind of training which I mentioned at the end of Chapter XVII,—the familiarizing of one's self with the characteristics of the organic forms of things. The initial step can be taken at home by studying the angle at which the legs of a chair are set, the proportions of the panels of a door, the tapering of the crown of a hat, the tipping of the newel post to the stairway, the slope of your neighbor's roof or gable, or the topping of a chimney.

I have found in my travels to obtain data for the articles on Our American Art Schools, that The Art Amateur is used as a text-book in the art departments of a great many of our schools and colleges. I know this



will meet the eye of a great many teachers, and I cannot resist the temptation to plead earnestly with them to take cognizance of the value of this method of teaching; and beg them to leave the student to study for himself, whenever possible, the character of any object that he is about to incorporate in a composition from that object itself, and not to rely upon the more general impression of its form that the memory retains; and furthermore, the importance of showing the student the possibility of making effective pictures of the most commonplace objects he sees daily.

An example from my own experience may be permissible. A student has made a head-piece for an article to appear in the "Biological Department" of the college paper. This heading consists of a medallion head of Minerva, on either side of which is a microscope, an owl, the human skeleton, the skeleton head of a deer and an hermetically sealed jar. The initial to the article is the letter T arranged behind the apparatus used in experimental botany known as the clino-stat. The tail-piece consists of the mounted skeleton of a dog (which is in the museum and therefore familiar to all of the students) with a rat gnawing its tail. Now, with the exception of the lettering, nothing was imagined, but everything was simply but carefully drawn from the object. The microscope, the jar, the clino-stat, were sketched in the laboratory, the skeletons and the stuffed owl drawn in the museum, and the head of Minerva copied from a cast in the drawing-room.

There are no schools or colleges that could plead a dearth of subjects by way of excuse for neglect of this method of object drawing; and I would humbly suggest that the readers of these articles who are teachers should require from their students a month or two of practice in making compositions of objects near at hand. I know of no better illustration of how this may be done than the initial letter of this article, where we find paint-box and brushes so delightfully arranged with the letter. Let the teacher keep a scrap-book of designs clipped from the illustrated papers; such a book is of great assistance in teaching; there is no better way to meet the objections of a stubborn pupil when he says, "No one can make anything artistic out of that," than to show him a clever design where the identical object has been successfully treated. ERNEST KNAUFFT.

THE PRINCIPLE OF LITHOGRAPHY.

"LIKE water off a duck's back" is a common expression, and, like many a common saying, has, if one will only look for it, a law underneath it. The non-affinity of grease and water under ordinary circumstances is one of nature's laws, and upon this law hangs the wonderful art of lithography in all its simple and complex branches. As this article is written expressly for those who have had no opportunity to acquaint themselves with the art, the writer will endeavor to make it as simple as possible, avoiding all technical terms and details that might be confusing.

Every one knows that if a surface is covered with an oily or greasy substance and a little water is poured over it the water will roll into little balls, as quicksilver does when turned out on a table or paper. If the surface is greased in part or in spots, instead of entirely, water will wet only those spots where no grease has been applied.

Take, as the object for experiment, a lithographic stone—a fine quality of limestone, grained or polished, as the case

may demand. Instead of applying grease in spots, write or draw with a greasy lithographic crayon, composed principally of tallow and lampblack.

Then pour over the stone a solution of gum-arabic and nitric acid, not, as many suppose, to raise the drawing into relief, but simply to intensify the antipathy of the grease and water. After drying, the surface is wet with water and a little turpentine, and the substance of the drawing washed carefully off, leaving the stone looking almost as clean as before the drawing was made. But although the body of the crayon has been washed away, the grease has left its spot and still holds to its old dislike for water; and a printer's roller charged with lithographic printing ink passed over the stone while damp brings back the lost drawing to its original beauty. A sheet of paper is now laid over the stone and subjected to a strong pressure in the printing press; then it is carefully lifted off, bringing with it a reversed fac-simile.

A colored lithograph or "chromo" is made in precisely the same way as the drawing described, sometimes as many as twenty different colors being used before a picture is completed. For the sake of simplicity, let us follow the process of reproducing in five colors a design of mosaics, as the colors in this are distinctly separate. A tracing of the design is made, transferred to the stone and carefully gone over with lithographic drawing ink—a fluid made from the same ingredients as the crayon. Five impressions of this tracing are made, and while the ink is still fresh a dry powder which adheres is dusted over them. Each impression is then laid face down on a fresh stone, subjected to the pressure of the press, and, when lifted off, leaves the outline of the original tracing, in powder only. The parts of the design that are yellow are drawn in the corresponding parts of the tracing on one of these stones; the parts that are red on another; black, blue and gray on the others. They then go through with the process with gum and acid, as already explained, and the stone that is prepared for the yellow is inked in with yellow printing ink; the one for red in red ink and so on. The yellow is then printed on clean sheets of paper, the other colors following in their turn on the same sheets until a complete reproduction of the design is the result.

It can be readily seen that if a little of one color is lapped over another its tone will be changed, and so a never-ending variety of delicate tints may be obtained.

